

Appl. No.: 10/009/453
Response dated February 17, 2005
Reply to Office Action of November 18, 2004

Remarks

Claims 9, 10, 12-16 and 18-24 are currently pending in this application.

Before discussing the rejection over the prior art, Applicants deem it prudent to set forth what they consider to be their invention.

The invention is a composition comprising an active ingredient selected from a group consisting of cosmetically-active ingredients and pharmaceutically-active ingredients and mixtures thereof; and (b) metal soap nanoparticles having a mean diameter of from about 10 to 300 nm, wherein the metal soap nanoparticles are coated with a coating compound selected from a group consisting of protective colloids, emulsifiers and mixtures thereof.

Applicants have unexpectedly discovered that the stability of lotions and creams and their consistency are significantly improved by the addition of the coated metal soap nanoparticles and at the same time the preparations have a more intensive white opacity.

Claims 9-10, 15-16 and 21-24 stand rejected under 35 U.S.C. 102(b) as anticipated by Selvaraj et al. (WO 97/13503, PTO-892). Applicants respectfully submit that Selvaraj et al. neither teaches nor suggests the present invention.

Selvaraj et al. is directed to a method for synthesizing nanoparticles of pharmaceutically-active ingredients and pharmaceutical compositions containing the nanoparticles of the active ingredients. The process comprises preparing a solution of the pharmaceutically-active ingredients and a matrix material, spray-drying the mixture and recovering the nanoparticles of the active ingredient. The matrix material can be a metal soap such as calcium stearate (page 6, line 19). The function of the matrix material is set forth at page 12, lines 3-21. Again, at page 17, line 17, calcium stearate is noted as a host matrix for the pharmaceutically-active drug composition. Again at page 18, line 20, calcium stearate is noted as a surface modifier. The surface modification properties of calcium stearate and magnesium stearate are equated to gelatin, casein, phospholipids, stearic acid, gum acacia, cholesterol, benzalkonium chloride, glycerol monostearates

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cetostearyl alcohol and various other materials (see page 18, line 18 to page 20, line 11) materials. The matrix material is removed from the nanoparticles of the active ingredient (page 23, lines 5-13).

Applicants respectfully submit that Selvaraj et al. neither teaches nor suggests nanoparticulate metal soaps coated with a protective colloid and emulsifier and mixtures thereof. Selvaraj et al. discloses active pharmaceutical compositions within a matrix, which matrix material can conform to a metal soap. In addition, a metal soap can be utilized to modify the surface of the nanoparticles. Applicants respectfully submit there is neither teaching nor utility of metal soap nanoparticles coated with a protective colloid or emulsifier.

To be a reference upon which a rejection under 35 U.S.C. 102(b) can be based, the reference must disclose each and every limitation in the claims. Applicants respectfully submit that no place in Selvaraj et al. is there a teaching or suggestion of nanoparticles of a metal soap coated with a protective colloid or an emulsifier or mixtures thereof. Applicants therefor respectfully submit that a rejection of the claims over Selvaraj et al. is untenable and respectfully request that the rejection be reconsidered and withdrawn.

Claims 12-14 and 18-20 stand rejected under 35 U.S.C. 103(a) as unpatentable over Selvaraj et al. Applicants respectfully submit that Selvaraj et al. does not teach or suggest the present invention.

As discussed above, there is neither teaching nor suggestion in Selvaraj et al. of nanoparticles of metal soaps coated with the protective colloids or the emulsifiers and mixtures thereof as presently claimed.

Applicants further submit that there is neither teaching nor suggestion of metal soap nanoparticles or any utility for such a material. Applicants have unexpectedly discovered that the metal soap nanoparticles provide certain improvements to compositions containing active ingredients and the metal soap nanoparticles. As stated in the present application at page 1, lines 19 through 24, the metal soap nanoparticles improve the stability of lotions

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and creams and their consistency and in addition provides the lotions and creams with an even more intensive white opacity. Applicants therefor respectfully submit that Selvaraj et al. bears no relation to the present invention and a rejection under 35 U.S.C. 103(a) is untenable and respectfully request that the rejection be reconsidered and withdrawn.

Claims 15-16 stand rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent 6,716,438 (hereinafter noted as Schroeder et al.). Schroeder et al. discloses a method of making a body deodorant comprising forming a deodorant composition comprising nanoscale antimicrobial particles wherein the nanoscale antimicrobial particles comprise one or more antimicrobial agents having a particle diameter in the range of from about 5 nanometers to about 500 nanometers. Claim 9 of Schroeder et al. is directed to the method of claim 1 wherein the nanoscale antimicrobial particles are coated with a coating comprising one or more of emulsifiers, protective colloids or mixtures thereof.

Applicants submit that Schroeder et al., does not make claims 15 and Claim 16 of the present application obvious.

Claim 15 is directed to a process for enhancing the stability, opacity and consistency of a cosmetic or pharmaceutical composition comprising adding metal soap nanoparticles having a mean diameter from about 10 to about 300 nm to the composition wherein the metal soap nanoparticles are coated with a compound selected group consisting of protective colloids, emulsifiers and mixtures thereof. Claim 16 is directed to the process of claim 15 wherein the metal soap nanoparticles have a mean diameter of from about 50 to about 150 nm.

Applicants respectfully submit there is no relation between the use of nanoparticles of an antimicrobial material and the introduction of nanoparticles of a metal soap that are coated with the protective colloid or the emulsifier.

To be obvious over the teachings of Schroeder et al., there must be some suggestion or teaching which would lead one skilled in the art to the present invention.

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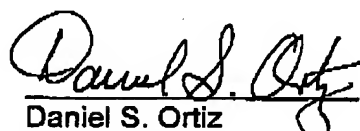
Applicants respectfully submit that outside of being in the field of nanoparticles, there is no relationship between the antimicrobial nanoparticles and the stability, opacity and consistency improving nanoparticles of the metal soaps. There is no mention of nanoparticles of metal soaps in Schroeder et al. and no incentive to one skilled in the art to attempt to make such materials or to coat the materials with the protective colloid or the emulsifier. Applicants therefor respectfully request that the Examiner reconsider rejection on the grounds of double-patenting of the obviousness type over Schroeder et al.

In view of the above discussion, Applicants respectfully request that the Examiner reconsider the rejections and allow the application.

Respectfully submitted,

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